REMARKS/ARGUMENTS

Reconsideration of the Office Action dated January 25, 2008 is respectfully requested.

Claim 23 was objected because of the informalities. Claim 23 was currently cancelled.

Claim 23 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claim 23 was currently cancelled.

Claim 21 was rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,268,771. Claim 21 was currently amended to include features originally described in claims 23-25 and 28-30, which were not recited by claim 1 of U.S. Patent No. 7,268,771. Accordingly, the amended claim 21 would not be obvious to people with ordinary skill in the art.

Claims 21-25, 27-30, and 32 were rejected under 35 U.S.C. §103(a) as being obvious over U.S. Published Application No. 2002/0008692 ("Omura") in view of U.S. Patent No. 6,078,274 ("Inou") and in further view of U.S. Published Application No. 2001/0055005 ("Teterwak"). Claim 21 was currently amended to include features originally described in claims 23-25 and 28-30. Claims 23-25 and 28-30 were currently cancelled. It is respectively submitted that the combination of Omura, Inou, and Teterwak does not render claims 21-22, 27, and 32 obvious. Omura, Inou, and Teterwak at least do not disclose the limitation of the "input induction section" which includes an insulated flexible membrane and electromagnetic induction receiving antenna arrays, as recited in independent claim 21.

The Examiner found that the transmitting transducers described in Omura disclose the electromagnetic induction generating layer in this application.

However, they are very different in structure and function. Omura discloses transmitting transducers located at corners of the transparent board to generate surface elastic waves through mechanical vibration, which is not an electromagnetic induction generating layer comprising a flexible membrane and antenna arrays to generate an induced location signal. Thus, transmitting transducers in Omura have very different functions and structures from the electromagnetic induction generating layer. Omura does not disclose the input induction section recited in claim 21.

Independent claim 21 recites an electronic whiteboard containing a main unit and an input pen. The main unit has a writing layer as surface, a bracket as bottom, and a frame around. Between the writing layer and the bracket are an input induction section, a recognition controlling circuit, and a signal output device. The input induction section includes a covering layer, an electromagnetic induction generating layer, and a bottom support bracket layer. The electromagnetic induction generating layer further comprises a base layer, which is an insulated flexible membrane made by a film material, and electromagnetic induction receiving antenna arrays printed on both sides of the base layer. The input pen has a radio signal generating device which can emit electromagnetic signals. When the input pen touches the writing layer of the electronic whiteboard, the electromagnetic signals penetrate to reach the input induction section. The electromagnetic induction receiving antenna array in the input induction section is induced to generate a location signal which is transmitted to the recognition controlling circuit for processing.

Omura is regarding an electronic blackboard system with a touch input device. However, the touch input device operates in a very different way from this application to sense a touch position and does not disclose the input induction

section as recited in claim 21. The touch input device senses the touch position through the surface elastic waves transmitting on the touch surface, rather than through the electromagnetic signals in the input induction section of claim 21. The touch input device 102 has a transparent board 200 and one surface of the board is a touch surface . The transparent board 200 comprises a transmitting transducer 202, a receiving transducer 203, and reflection arrays 204, 205 to sense a touch position in the X-axial direction in the touch surface, and a transmitting transducer 206, a receiving transducer 207, and reflection arrays 208, 209 to sense a touch position in the Y-axial direction in the touch surface. The transparent board 200 is a glass board and the reflecting arrays are formed by baking the glass board at a specified temperature after a screen is printed with glass paste. Omura, page 7, [0113] and [0119]. The transmitting transducer 202 converts an electronic signal received from the controller 103 to a mechanical vibration to generate surface elastic waves which propagate along the touch surface of the board 200. The reflection arrays 204, 205, located at the edge of the touch surface, reflect the surface elastic waves transmitted from the transmitting transducer 202 and guide the waves to the receiving transducer 203. When a user touches the touch surface with a fingertip or touch pen, the surface elastic waves propagating on the touch position are absorbed or dispersed and, as a result, largely attenuated. By identifying a point of time when the wave is attenuated, the touch position in the X-axial direction can be identified. The touch position in the Y-axial direction can be identified by the same process. Omura, page 7, [0120]-[0122] and page 8, [0123]-[0125].

Omura does not disclose the input induction section recited in claim 21. The input induction section has a base layer which is an insulated flexible membrane made by a film material. Omura discloses a transparent board made by glass,

which is neither flexible nor made by a film material. The input induction section has an electromagnetic induction receiving antenna array printed on surfaces of the flexible membrane, which is induced by the electromagnetic signals from the input pen to generate an induced location signal. Omura discloses transmitting transducers located at corners of the transparent board to generate surface elastic waves through mechanical vibration, which is not an electromagnetic induction generating layer comprising a flexible membrane and antenna arrays to generate an induced location signal. Thus, transmitting transducers in Omura have very different functions and structures from the electromagnetic induction generating layer. Omura also discloses receiving transducers located at corners of the transparent board to receive surface elastic waves, which is not an antenna array printed on the flexible membrane and can not be induced by electromagnetic signals to generate an induced location signal. Moreover, Omura does not disclose the covering layer in the input induction section.

In addition, Inou still does not disclose "an insulated flexible membrane which can be a film material." Inou describes a flexible insulating substrate 3 made of a polymeric film such as polyethylene terephthalate which is not a film material recited in claim 21 of this application. The common film material in claim 21 is transparent such as the film used in cameras and has advantages of reducing cost and simplifying manufacturing process.

Moreover, currently amended claim 21 adds a number features which are not disclosed in Omura, Inou, and Teterwak. These features include "said induction antenna array cells are the cells printed on the two sides of the membrane surface respectively," "more than one layer of induction antenna cells along X axis and Y axis are the cells printed on the two sides of the membrane surface and the layers are insulated from each other," and "the intervals between the induction antenna

cells of each layer are different for more than one layer of induction antenna cells." As to the first added feature, a bottom layer in the horizontal direction and a top layer in the vertical direction can establish a 2-D coordinate system on the induction section as described in one embodiment. The third added feature can increase the recognition precision of the touch point in the invented electronic whiteboard because the coordinate intervals are reduced.

Furthermore, there is no motivation to combine Inou and Teterwak with Omura. Teterwak teaches a high voltage crystal controlled oscillator for an electronic pen used with an electrostatic digitizing tablet. However, the touch input device of the electronic blackboard system in Omura senses touch location through the attenuation of surface elastic waves, rather than electromagnetic signals generated by the electronic pen in Teterwak. As a result, there is no motivation to combine the electronic pen in Teterwak with the electronic blackboard system in Omura, which does not need an electronic pen at all.

Claims 26 was rejected under 35 U.S.C. §103(a) as being obvious over U.S. Published Application No. 2002/0008692 ("Omura") in view of U.S. Patent No. 6,078,274 ("Inou") and in further view of U.S. Published Application No. 2001/0055005 ("Teterwak") and U.S. Patent No. 7091909 ("Nakano"). It is respectively submitted that the combination of Omura, Inou, Teterwak, and Nakano does not render claim 26 obvious. Claim 26 depends on claim 21 and includes all limitations of claim 21. Omura, Inou, Teterwak, and Nakano at least do not disclose the limitation of the "input induction section" which includes an insulated flexible membrane and electromagnetic induction receiving antenna arrays, as recited in independent claim 21. As discussed before, Omura, Inou, and Teterwak do not disclose the limitation of the "input induction section." In addition, Nakano is directed to an antenna unit adaptable to a wideband and does not disclose the

limitation of the "input induction section." Moreover, there is no motivation to combine Nakano with Omura because the antenna unit disclosed in Nakano is very different from the receiving transducers in Omura. Furthermore, the applicant suggests that Nakano, filed on January 28, 2005 and published on October 6, 2005, is not a prior art reference to this application.

Claim 31 was rejected under 35 U.S.C. §103(a) as being obvious over U.S. Published Application No. 2002/0008692 ("Omura") in view of U.S. Patent No. 6,078,274 ("Inou") and in further view of U.S. Published Application No. 2001/0055005 ("Teterwak") and U.S. Published Application No. 2002/0074171 ("Nakano Publication"). It is respectively submitted that the combination of Omura, Inou, Teterwak, and Nakano Publication does not render claim 31 obvious. Claim 31 depends on claim 21 and includes all limitations of claim 21. Omura, Inou, Teterwak, and Nakano Publication at least do not disclose the limitation of the "input induction section" which includes an insulated flexible membrane and electromagnetic induction receiving antenna arrays, as recited in independent claim 21. As discussed before, Omura, Inou, and Teterwak do not disclose the limitation of the "input induction section." Nakano Publication also does not disclose the limitation of "input induction section."

In view of the foregoing, the applicant suggests that the claims presently in the application are now in condition for allowance. Thus, a favorable action in the form of a Notice of Allowance is respectfully requested at the Examiner's earlier convenience.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (310) 785-4600 to discuss the steps necessary for placing the application in condition for allowance. If there are any fees due in

connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
HOGAN & HARTSON L.L.P.

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